Rocky Flats Citizens Advisory Board

Minutes of Work Session

September 5, 1996
Part II

Click here to go back to Part I

Question: LeRoy Moore: You exist only because Iggy did his work and there's a controversy that brought you into existence.

Answer: Bruce Honeyman: If Iggy had done his work completely, we wouldn't have this controversy. You haven't seen the dynamics between the panel as a whole, or the panel and Kaiser-Hill. As is the nature of science, we're critical with each other and with Kaiser-Hill. Our goal is to understand what's going on at the site. The best way is to find the truth. Iggy would have made our jobs a lot easier if he had been up front about his data and provided data so that we could evaluate it. With scientific issues, if you make a claim, you have to back it up. Personally, I was incensed by having a claim made and not having it backed up - that's part of the scientific discourse. Scientists argue with each other all the time. But we're trying to find the truth. Believe me, if I thought plutonium was screaming offsite, I'd be the first one to call the governor. I live here and personally I think the waste disposal practices of DOE have been appalling in the past. But we're trying to do something about it.

Question: Jack Kraushaar: Are you going to look at the uptake of plutonium and other metals into plants and its flow through the ecosystem, or are you just going to consider soils and transportation within the soils?

Answer: Bruce Honeyman: Our charter and our expertise is the geochemical behavior, but the biotransformations are an important part of the issue. We aren't going to look into that, but one of the things we will do as a panel is assess holes in the data knowledge. It might be useful, in terms of long range remediation strategies, to include plant uptake. We're not going to do it in this panel, it's one of our recommendation for work to be done.

Question: Hank Stovall: If there's any question about whether or not plutonium got offsite, I can tell you that plutonium did get offsite. We shut our water system down because the reading of plutonium in our bypass ditch went from less than .05 picocuries per liter to about .2. If you're not aware of it, you might want to check with CDPHE and

1/12

others. Our concern was big enough we shut down the water system to our public.

Answer: Bruce Honeyman: I have always believed that the chemical environment is in flux. Three years ago Iggy and I had a talk about plutonium moving when he said that it was fixed in the soil and I said it doesn't make sense geochemically, physically. What I was responding to here was the large amounts of radionuclides that Iggy was postulating were leaving the site. A couple of picocuries per liter, I know that occurs. David Janecky: We are comfortable with the fact that yes, plutonium was moving around. The question is how much and how do you calculate how much went offsite or how much was moving onsite and potentially how much could go offsite. The only viable path forward from here is to look at where we are. Our job on this panel is to evaluate what is the best recommendation of what should be done for remediation, and how best to respond to events so that you don't see any plutonium in your water system.

Question: Eugene DeMayo: In this field it seems we have a limited understanding of what happens to the plutonium when it changes. I wonder about your goals, do it right, do it once and get it done on time. I have a problem with that, because it seems that the second two parts of that preclude the first part, which is if you want it done right you may have to do it more than once, and it may not get done the way you want because you don't know what you're dealing with. We have a Ten Year Plan and I think it's ludicrous. It's good to try to do these things and try to do it right, but we don't know enough to do it right the first time in a limited amount of time, and that applies both to the Ten Year Plan and to deciding what plutonium is doing out there. There's a lot of ego and pride put into getting it done right the first time on time, and that works against us as a society because we're not really capable of that. Politically it looks good and sounds great, but I don't see how it's possible.

Answer: Bruce Honeyman: There's an old saying in building houses: measure twice, cut once. What we're trying to do is the engineering or science version of that. I'm saying do whatever you're going to do when you have your best understanding of what needs to be done. There's always going to be a trade-off. Good engineering is based on two things: 1) a thorough understanding of the basics of what's going on, and 2) building in some sort of a safety factor. Nobody wants to spend money doing more studies if you don't need more studies. You want to do tactical studies and you want to have them done with a specific purpose and a specific objective. David Janecky: When I look at that goal statement and I look at doing things in stages, my idea is to identify a high priority problem and then fix it. Where are the problem spots we know of; how do we strategize? Budgets are going to constrain us, and the effort has been put on where we know the bit problems are.

Comment: Eugene DeMayo: We deal with DOE and Kaiser-Hill all the time, and as a community member I haven't seen any particular need to have Rocky Flats cleaned up in ten years. If we can, that's great, but more important, clean it up right. From what I can tell, we don't have the technology to clean it up right now.

Question: Elizabeth Pottorff: You mentioned uranium in your introduction, could you tell us about what you're studying as far as uranium goes?

Answer: Bruce Honeyman: We're looking at plutonium, americium and uranium. We've focused on plutonium tonight because it is the radionuclide that is primarily on the public's conscience, and also it is a more complicated radionuclide to understand. What we're doing about uranium is looking at the body of work and have come up with conclusions about uranium mobility in the soils, as well as americium. David Janecky: There is more data and more potential for plutonium mobility, so that has become the focus. Americium has been ignored because if you understand the one, you start to understand the other. Uranium has not been as highly charged in terms of concerns about it.

Question: Susan Johnson: David, what do you think of the RESRAD model and the parameters?

Answer: David Janecky: RESRAD is a good baseline model. It has some validity to it. You have to understand it's also flawed like all models. I look at RESRAD like a business plan, what are the projections - it's a baseline for comparison. Because of that, you need to also look for where it doesn't work.

Question: Susan Johnson: What are its weaknesses?

Answer: David Janecky: One of the weaknesses is in terms of dealing with things like plutonium that have a large particulate potential for transport. That's both a plus and minus, because the particulates are not as mobile as the species that are dissolved. I'm not sure what changes I would propose.

Question: Susan Johnson: Do you think it's scientifically reasonable for them to be setting these soil action levels with this much uncertainty?

Answer: David Janecky: If you don't set it, you can't evaluate what you're doing.

Question: Kenneth Werth: I found your remarks about Iggy misleading. He was cut off at the knees when he wanted to extend research on plutonium migration. Iggy was working as an independent, and you are working for Kaiser-Hill.

Answer: David Janecky: I'm sorry you feel we're working for Kaiser-Hill, because Kaiser-Hill has come to see that we can be as critical of them as we are of other people. In order to have people here, somebody has to pay for it, the money has to come from someplace. Iggy was operating as an independent, and that had a tight focus. My scientific evaluation

of that is that pieces are missing, and there are capabilities that did not exist to evaluate plutonium mobility. As a scientific reviewer, had I received a proposal from Iggy to do the next step, I don't think it would have passed my review. I don't believe that I have any long-term right to a job or to a set of research funding. I take issue with statements that because I developed something, I have a right to it. Somebody makes a decision and I have to make the next step, to decide what to do next on the research. That's the reality of scientific life.

Question: Kenneth Werth: Iggy was doing research two years before Kaiser-Hill even came on board. How can you dismiss his work and state your own conclusions?

Answer: David Janecky: I haven't dismissed his work. Bruce Honeyman: My understanding is that Iggy was supported by the DOE complex in one way or another for the entire time he did his work, by EG&G or Kaiser-Hill, just as we are. I want to know what the truth is about what's going on with radionuclides at the site. I have no bones to pick with Iggy. He did a good job at looking at water flowing through the site. Three years ago I told him he had to look at chemical speciation; he ignored me. He ignored a review in 1992 that said he should look at chemical speciation. We now know a lot about where water's going at the site. But we don't know about the chemical form. The good that he did with water transport is offset by the fact that there is essentially nothing on chemical speciation.

Question: Beverly Lyne: I was at the meetings in June, and it was great that CAB was invited. I wonder why did you meet in Los Alamos for your August meeting, where is the public participation, I would like to know what your budget is, and what's the plan for continuing to involve the Board?

Answer: Bruce Honeyman: Our budget was $50,000 for four people, that includes overhead and benefits. It comes out to about two weeks per person; we have each spent far more than that because we're interested. It was convenient to sit down and talk about technical issues rather than writing notes or talking on the phone. Some of our meetings, it just was not efficient to have a lot of people there because they were very technical discussions. For future participation, we believe that public participation is important to what we need to do. Our panel funding is up at the end of the month, we're trying to find ways to continue the funding and to find ways to be more effective at addressing your concerns. We want to know what is important to you and how to work on some of these issues. David Janecky: Dave Clark and I didn't have any money to travel. It was important to talk face-to-face, and Bruce and Peter were able to come down to Los Alamos to meet with us. We need input on whether what we're looking at is what is perceived or what are the questions you have. Knowing what the concerns are is good input for us.

Question: Gary Thompson: I understood from Dr. Litaor that migration was more

flotation, because of the water. My recollection is that the plutonium had not migrated much at that point. Now there is concern that it is moving around a lot. Apparently plutonium does more moving than we heard in the past.

Answer: Bruce Honeyman: If you understand the dynamics of the system, the fluid flow and the speciation, the spring event shouldn't come as a surprise. Good engineering starts out with knowing what you're dealing with. Plutonium environmental chemistry is complicated, but it is understandable. There's enough known to chart a path forward. But we probably don't know enough to know with absolute certainty what is going to happen. If you know the detailed chemistry and the physics, then you can anticipate.

Question: Tom Marshall: There is a history of problems regarding research in the DOE complex, where those hired to do the research are expected to suit the wishes of those who are paying them. A number of us will look closely at the work you do, and it will be up to you to demonstrate that you're being objective in your analysis. Regarding the RESRAD model, Bruce, you mentioned that the geochemical parameters were consistent with the state of knowledge at the site now and seemed to indicate it was okay. Earlier, you said the state of knowledge at the site regarding speciation is not good. That raises a question. You also mentioned that Iggy Litaor did not provide data to back up his work, and since heard you talk about the fact that he did not look at speciation. However, it's important to remember that his funding was cut and he was not allowed to complete his studies. My question is, you indicated you don't think there is a need for further study, is that true or are you going to recommend following up this issue?

Answer: Bruce Honeyman: There are holes in the data, so one of the things we are assembling is a list of recommendations for the work. I don't want you to leave us with the feeling that we know everything about radionuclides in the soil, or that nothing is known. We're somewhere in the middle. Regarding RESRAD, two weeks ago Peter and I were asked to look at a draft document RESRAD. We assembled a list of questions that we sent back to Rick Roberts. We looked at the geochemical parameters that went into the model. Within the bounds of what I understand about the site and given the large uncertainty in studies, I feel okay with what they're doing. Iggy has had six years to look at speciation. You don't do speciation at the end, you do it at the beginning. It's a fundamental difference in philosophy, and I personally feel that was a mistake. David Janecky: There is a calculation that was stated, that half a curie of plutonium was transported, the implication is offsite. The statement was made, but we were not given information on how that was interpreted. That's a big question to us.

Comment: LeRoy Moore: I would like you to write to Iggy Litaor and ask him to send a letter that you can make as part of your report explaining to CAB why he hasn't provided information to you. I would also like you to invite Iggy Litaor to comment on your paper.

Response: David Janecky: Okay, no problem.

Question: Mary Harlow: There was a fire at Rocky Flats this past week, a grass fire, and I think it would be a prime time to take some samples from the plants, and also to be able to monitor that area for erosion and the effects of rainfall. Are there any plans to do that?

Answer: David Janecky: We haven't made any proposals. That has a lot of merits to it. It meets some areas that we had identified as needing more information. There are probably some measurements already going on. Frazer Lockhart: The fire was not in an area that's known to have any plutonium. I don't know what's being pursued by Kaiser-Hill, but it would surprise me if they are pursuing it.

Question: Tom Marshall: That's in the southern part of the site, you're saying there's no contamination?

Answer: Frazer Lockhart: As far south as that was in the buffer zone, there are no identified elevated plutonium levels. The plutonium distribution goes mostly out to the east and southeast. This was well south of Woman Creek.

Question: Beverly Lyne: Can you tell me who asked you to review RESRAD, what agency and when?

Answer: Bruce Honeyman: Rick Roberts, with RMRS I believe. I can't remember when they asked, about the second week in August. David Janecky: Some questions about RESRAD were asked at the first meeting we had in June.

PUBLIC COMMENT PERIOD:

Comment: Kenneth Werth: I was wondering if the Board would consider hiring an independent researcher?

Response: Tom Marshall: Right now the Board is considering that, we have a certain amount of money we can contract out to have research done. We are putting out a preliminary request for expression of interest. We'll be developing specific RFPs from that. We have not talked about doing an analysis of Iggy's work specifically.

Comment: Kenneth Werth: Not Iggy's work, just see if a couple of different members would look into what these four on the panel are saying.

Response: Tom Marshall: You're talking about members of the Board taking a close look at what they're saying. It sounded to me like there was a fair amount of interest expressed by the Board, so I assume we will be following up on that. The E/WM Committee is the

logical place to take a look at that. We will be discussing our work plan scope of work, and we can make sure this issue comes up for consideration.

Comment: Kenneth Werth: I'm concerned about fire and wind out there too, because they get 100 mile per hour winds out there. What kind of effects will that have? All they're doing is looking at water or floods. I want them to look into fire and water. Chernobyl had a huge fire, and it blew it into four different countries, and they found a high rate of thyroid and all different kinds of cancer.

Response: Tom Marshall: As I said, we will be discussing issues at our retreat, and we can respond to your questions at our next Board meeting.

ENVIRONMENTAL/WASTE MANAGEMENT COMMITTEE - CLEANUP PRINCIPLES AND CRITICAL REPORTING ELEMENTS (Tom Gallegos): CAB completed its work on this recommendation, the final step in completing its work plan for last year. The purpose of this recommendation is to incorporate public/stakeholder perspectives into DOE's process of determining appropriate cleanup levels. These principles are meant to provide guidance to DOE and regulators of Rocky Flats cleanup activities, and to provide standards for important information that should be considered in each cleanup project. Highlights include:

- Health and safety during cleanup: Safety management must be equally and consistently implemented to ensure maximum health and safety protection for workers, the public and the environment. CAB believes retention of a trained work force will help achieve this goal.

- Waste generation: Cleanup should not generate more waste than necessary to meet cleanup goals.

- No further degradation of the environment: Protecting natural resources is a priority in selecting cleanup alternatives, including ecological, geological, hydrological, and air resources. Precautions must be taken to prevent cross-contamination, and to ensure that no new or previously cleaned areas are contaminated.

- Technology utilization: An inventory of cleanup needs should be matched against current technology to identify where new technologies may be more cost-effective or efficient.

- Background levels: CAB believes the ultimate long-term goal for cleanup should be to achieve a level of residual contamination equal to or less than average background of radiation for the Front Range, when technology allows for this. In

the near-term, standards must be set that are protective of human health and the environment.

- Risk levels/land use: Residual contamination and associated health risks should be compatible with future site use.

- Budgetary considerations: Budgetary constraints should never affect the actual level of risk reduction.

- Institutional controls/risk elimination: Risk elimination is the preferred method of controlling the hazards of contaminant escape, and all restricted use areas must require an institutional control program to provide monitoring, testing and contingency plans in the event of a contaminant release.

- Timing of decisions: Cleanup activities and environmental restoration must be completed before future land use planning is finalized.

Decision: *Approve Cleanup Principles and Critical Reporting Elements recommendation, incorporating changes to the text. APPROVED BY CONSENSUS.*

PRESENTATION BY NATIONAL ISSUES COMMITTEE ON PRIVATIZATION
(Tom Clark): Tom gave an outline and overview on the background of privatization issues. Generally, privatization is considered to be a government agency selling a portion of its operation to a private sector organization, thus allowing market forces to define the price, nature and quality of the service. Rocky Flats is considering privatization for many of its future projects. Currently, the National Conversion Pilot Project (NCPP) is one example of a privatized project. Rocky Flats has set the following requirements for privatization in waste management: 1) define the product DOE wants to buy; 2) characterization of the waste stream to be treated; 3) well-defined regulatory framework; and 4) financial guarantees to protect investors. The goals of privatization are to be cost-effective, comply with pertinent laws, ensure high safety standards are met, help the schedule acceleration, and mortgage reduction. Possible privatization projects for Rocky Flats' Ten Year Plan include: treatment and disposal of pondcrete/saltcrete; construction and operation of plutonium vault; D&D of buildings 779 and 886; water treatment of OU 1 and OU 2 areas; construction of TRU waste repackaging/storage facility; construction of both low-level waste storage and low-level remediation waste storage facilities. The National Issues Committee will continue to study this issue and will provide a recommendation to CAB in the near future.

Q&A Session:

Question: Ralph Coleman: Under the third party financing, does it imply that the work

doesn't have to get paid for? You're going to stretch the budget, but somewhere down the line that all has to be paid for, eventually DOE has to pay for it.

Answer: Tom Clark: It has to do with where the dollars are coming, either a huge amount of money in the beginning or a future cost at the end. Mike Bolles: We feel that every dollar we take out of a certain area and put into risk reduction is a better return for the Department. This way we can get someone else to front the capitalization costs, and we can pay the bills later rather than sooner.

Question: Kenneth Werth: In terms of privatization, have you ever looked at the Corps of Engineers? The Corps is looking for work.

Answer: Frazer Lockhart: Yes, they have done some work at Rocky Flats and at other DOE sites. Since they are a governmental agency as well, I don't know that it falls under the definition of privatization.

Comment: Tom Marshall: You're talking success in terms of being cost-effective. We need to look at success in a number of ways, and one is that we have a good cleanup that is protective of public health and safety and the environment both during the cleanup and when it's completed. That means we must make sure there are avenues for public input.

Question: Tom Marshall: When you say accountability of the private sector, what kind of accountability?

Answer: Mike Bolles: The financiers have a level of scrutiny attached in order to agree to lend money. The contractor must agree to work with regulators. With privatization, you don't pay the contractor until they do the job and meet the specifications. They are strongly motivated to do the job properly and on time and within budget. They are financially accountable.

Comment: Tom Marshall: If Kaiser-Hill was doing the work that MSC is doing, I wonder whether there would be union people performing that work. That's something I would be interested in finding out.

Question: Mary Harlow: Did anyone mention the loss of history when you privatize in a certain cleanup area, what happened, what was taken out, what methods were used, where did it go? Doesn't that information get lost when you privatize?

Answer: Tom Clark: I didn't find anything about that in my research.

Comment: Ralph Coleman: One thing we're missing, some private contractors have experts in doing specific jobs but sometimes it's pretty hard to hire those people because

they're working somewhere else. There are some things that have to be done that nobody at DOE or Kaiser-Hill has ever done. A private contractor has employees with the skills you need.

Response: Tom Clark: In general we're moving from government-owned contractor-operated, to contractor-owned contractor-operated, that's what privatization is looking at. Some of the outsourcing functions may not fit that. Mike Bolles: With privatization the company brings the capital to the job, we pay it off with an amortized cost such as a fee. Mariane Anderson: We pay more in terms of a product rather than a process. The contractor owns the process, and we pay for the product.

Question: Steve Tarlton: I see possible conflict between minimizing risk of failure and being innovative, trying something that you can't make work within the DOE system, do you have any comment on that? The minimum risk approach is what we're doing now. What we're trying to do in privatization is to break that mold. To me there has to be risk to have a reward.

Answer: Frazer Lockhart: There are many things that must be balanced, that's part of the struggle.

Question: Joe Rippetoe: I have no problem with privatization, but four to six months ago I hand-carried a letter to CAB requesting a detailed update on the MSC program. I would like an update on what phase they're in, are they standing on their own feet, I have problems with them not being unionized, and about hiring the right kind of people. I would just like accountability and a program presented about how they are doing.

Answer: Tom Marshall: I agree that we should get information on that and follow up on their progress. The problem now is there is a lot going on, important things. But we should consider your recommendation.

Question: Tom Gallegos: Couldn't some of Hanford's experiences be rolled into a set of requirements for considering privatization projects, that might be a good project for some committee?

Answer: Tom Clark: There's a lot to be learned from looking into other's homework on this issue.

Comment: Jeremy Karpatkin: A lot of this within DOE is still a work in progress. The issue of third party financing, for example, to what extent is the government prepared to guarantee, even under certain circumstances, something beyond the fiscal year. Absent that guarantee, what kind of funding can a company get in the private capital market? All of these issues are dynamic.

BOARD BUSINESS:

- Approval of retreat agenda. CAB approved the agenda, with one addition to Session 1. Board members were asked to fill out and return the Board evaluation questionnaire which was included in the packet, and return to staff immediately.

- Announcement of facilitation training. The Board has agreed to provide facilitation training for its members. Staff will set up a date for the training, sometime in October. Training is mandatory for CAB co-chairs; however, all Board members are encouraged to participate. A form was passed out to all CAB members to give staff their preference for the date of the training. Members were asked to complete the forms and return to staff as soon as possible.

- Update by Health Committee. The literature review was completed, and formally presented to the Board. Linda Campbell, a nursing student, prepared the literature review and Beverly Lyne edited. Also, Linda Campbell must do a clinical preceptorship this semester, and she will do that work with the Health Committee. The preceptorship is an advanced level community health course in the community health nursing masters program. Linda has 150 hours to devote to Health Committee projects at no cost to the Board. In addition, the Community Needs Assessment completed this spring is currently at DOE-HQ awaiting approval.

EXECUTIVE SESSION:

Update on Soil Action Levels consultant/approval to fund additional dollars, if necessary. Contingent upon an acceptable presentation on Monday night, the Board members present will determine whether or not to ask the consultants on the Soil Action Levels to prepare a report. If the Board decides to, the consultants will be given guidelines toward preparing that report and ask them to come up with a breakdown of the costs. The contract will not exceed $4,000.

Update by Personnel Committee. The Board is approving the advertisement recommended by the Personnel Committee with some possible revisions, the advertisement will be run in local papers only.

NEXT MEETING:

Date: October 3, 1996, 6 - 9:30 p.m.

Location: Doubletree Hotel, 8773 Yates Drive, Westminster

Agenda: * *Presentation on Kaiser-Hill FY97 Performance Measures; Recommendation on Soil Action Levels; approve CAB 1997 work plan*

ACTION ITEM SUMMARY: ASSIGNED TO:

1) Revise and forward to DOE recommendation on cleanup principles- Staff

2) Prepare and return Board evaluation questionnaire to staff - Board members

3) Revise retreat agenda - Staff

4) Complete form regarding preference for facilitation training - Board members

5) Revise and run advertisement for personnel opening - Staff

MEETING ADJOURNED AT 10:00 P.M. *

(* Taped transcript of full meeting is available in CAB office.)

RESPECTFULLY SUBMITTED:

_____

David Navarro, Secretary

Rocky Flats Citizens Advisory Board

The Rocky Flats Citizens Advisory Board is a community advisory group that reviews and provides recommendations on cleanup plans for Rocky Flats, a former nuclear weapons plant outside of Denver, Colorado.

Top of Page | Index of Meeting Minutes | Home

Citizens Advisory Board Info | Rocky Flats Info | Links | Feedback & Questions

12/12